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United States Patent [19]
Omura

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- [54] **SPREAD SPECTRUM CELLULAR HANDOFF METHOD**
- [75] Inventor: **Jimmy K. Omura**, Cupertino, Calif.
- [73] Assignee: **Cylink Corporation**, Sunnyvale, Calif.
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Related U.S. Application Data

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- [51] Int. Cl.⁵ **H04R 1/02**
- [52] U.S. Cl. **375/1**
- [58] Field of Search **375/1**

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Primary Examiner—Salvatore Cangialosi

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[57] **ABSTRACT**

A method for handling off a transitioning-remote unit from a first microcell having a first base station communicating with a first plurality of remote units, to a second microcell having a second base station communicating with a second plurality of remote units. The first base station communicates to the first plurality of remote units using synchronous, code division multiple access at a first carrier frequency and a first power level. The second base station communicates simultaneously to the second plurality of remote units using synchronous, code division multiple access at a second carrier frequency and a second power level. The second power level is typically greater than the first power level. While the transitioning-remote unit transitions from first microcell to the second microcell, the second base station detects a power level of the remote-communications signal, exceeding a predetermined threshold, transmitted from the transitioning-mobile unit. The second base station signals to the first base station and to the transitioning-remote unit, to transfer the transitioning-remote unit to the second carrier frequency and a new chip codeword for communicating with the second base station. The transitioning-remote unit accesses using an access protocol, the second base station, and communicates from the transitioning-remote unit to the second base station using the new chip codeword, and direct sequence spread spectrum modulation at the second carrier frequency.

3 Claims, 2 Drawing Sheets

